

## **REMARKS**

### **Summary of the Office Action**

The drawings stand objected to under 37 CFR 1.83(a).

Claims 17-31 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claims 32-35 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as their invention.

Claims 16 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,077,582 to Kravette et al. in view of U.S. Patent Reissue No. 31,222 to McCracken, U.S. Patent No. 3,975,712 to Hepworth et al. and U.S. Patent No. 4,644,478 to Stephens et al.

Claims 18-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,077,582 to Kravette et al. in view of U.S. Patent Reissue No. 31,222 to McCracken, U.S. Patent No. 3,975,712 to Hepworth et al. and U.S. Patent No. 4,644,478 to Stephens et al. as applied to claim 16, and further in view of U.S. Patent No. 4,625,077 to Biffle et al.

### **Summary of the Response to the Office Action**

A Petition for an Unintentionally Delayed Domestic Priority Claim under 37 C.F.R. § 1.78(a)(3) is being concurrently submitted. The delayed claim for priority dates back through related applications to the December 13, 1989 filing of application Serial No. 07/450,605, now

U.S. Patent No. 5,084,875. The specification has been amended to indicate the relationship of the related applications and application Serial No. 07/450,605 to the present application.

Claims 16, 17, 19, 25, 26, 32, 33, 34 and 35 have been amended to more particularly point out and distinctly claim the subject matter which the Applicants regard as their invention. Claims 1-15 remain cancelled without prejudice or disclaimer. Claims 23 and 24 have been cancelled without prejudice or disclaimer. New claims 36 and 37 have been added. Accordingly, claims 16-22 and 25-37 are presently pending for consideration on the merits.

#### **Personal Interview with the Examiner**

On April 19, 2005, a personal interview occurred between the Applicant's representative and the Examiner in charge of the above-identified application. Applicant's representative thanks the Examiner for the courtesies extended during the interview. During the personal interview, a draft of the present response was discussed. The Examiner requested amendments to claims 19 and 34 to improve their form. The Examiner recommended an amendment to claim 25 to overcome the 35 U.S.C. § 112, first paragraph, rejection.

#### **The Drawings Do Not Contain Objectionable Subject Matter**

The drawings stand objected to under 37 CFR 1.83(a). In particular, the Office Action asserts at page 2 that five specific features of the claims are not shown in the drawings. Further, the Office Action requires that the specific features must be shown in the drawings or canceled from the claims.

First, the Office Action asserts that the feature of "wherein the control computer and the chip are separate chips" is not shown in the drawings. By way of the foregoing amendment, Applicants have cancelled claim 23, which is the only claim that recited such a feature. Accordingly, Applicants respectfully submit that this objection is now moot.

Second, the Office Action asserts that the feature of "wherein the chip has first circuitry for converting serial data transmitted from the personal computer into parallel data and converting parallel data transmitted from the copier into serial data, and second circuitry for driving a pair of signal lines according to the converted serial data, the first and second circuitry being incorporated in the chip" is not shown in the drawings. By way of the foregoing amendment, Applicants have amended claim 17, which is the only claim that recited such a feature. More specifically, Applicants have amended claim 17 to recited "wherein the chip converts serial data transmitted from the personal computer into parallel data and converts parallel data transmitted from the copier into serial data." Accordingly, Applicants respectfully submit that this objection is now moot.

Third, the Office Action asserts that the feature of "wherein a condition of the copier and setup parameters, a copy count and error codes of the copier are displayed on a display screen of the personal computer" is not shown in the drawings. Applicants respectfully traverse this objection to the drawings because this feature is clearly shown in the drawings. For example, Figure 21 of the present application shows elements on a display screen, such as "ID: 001", "TYPES: X-1025", "LOCATION: LAB", "STATUS: OFFLINE" and "NUMBER TO COPY: 00". Further, Figure 22 clearly shows a display listing of error codes. Accordingly, Applicants respectfully submit that this objection is not proper. If the Examiner persists in maintaining this

objection, Applicants respectfully request a more detailed explanation of why the feature of "wherein a condition of the copier and setup parameters, a copy count and error codes of the copier are displayed on a display screen of the personal computer" is considered to be not shown in the drawings.

Fourth, the Office Action asserts that the feature of "wherein the chip comprises a RAM" is not shown in the drawings. By way of the foregoing amendment, Applicants have cancelled claim 24, which is the only claim that recited such a feature. Accordingly, Applicants respectfully submit that this objection is now moot.

Fifth, the Office Action asserts that the feature of "wherein the chip comprises a microprocessor" is not shown in the drawings. Applicants respectfully traverse this objection of the drawing because this feature is clearly shown in the drawings. For example, Figure 8 and page 10, lines 6-10 of the present application indicate that a CPU 22 is a chip. Accordingly, Applicants respectfully submit that this objection is improper. If the Examiner persists in maintaining this objection, Applicants respectfully request a more detailed explanation of why the feature of "wherein the chip comprises a microprocessor" is considered to be not shown in the drawings.

For these reasons, Applicants respectfully submit that all of the objections to the drawings should be withdrawn. Further, Applicants respectfully submit that no drawing changes are necessary because the objections to the drawings are either moot as a result of the foregoing amendment to the claims or improper.

**All Claims Comply With 35 U.S.C. § 112, first paragraph**

Claims 17-31 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Further, the Office Action alleges that seven of the claims have subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. In particular, specific features of claims 17, 18, 23, 24, 25, 26 and 26 are alleged at pages 3-5 of the Office Action to not be supported by the specification of the present application.

First, the Office Action alleges that the feature of “wherein the chip has first circuitry for converting serial data transmitted from the personal computer into parallel data and converting parallel data transmitted from the copier into serial data, and second circuitry for driving a pair of signal lines according to the converted serial data, the first and second circuitry being incorporated in the chip” in claim 17 is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. By way of the foregoing amendment, Applicants have amended claim 17, to recite “wherein the chip converts serial data transmitted from the personal computer into parallel data and converts parallel data transmitted from the copier into serial data.” Support for this amendment can be found, for example, at page 15, lines 14-15 and page 20, lines 21-28 of the present application. Support can also be found, for example in Fig. 8, as well as, at page 13, lines 11-23 of the present application. Accordingly, Applicants respectfully submit that the 35 U.S.C. § 112, first paragraph, rejection of claim 17 is now moot.

Second, the Office Action alleges that the feature of “wherein the network comprises a plurality of lines, each of the plurality of lines having at least a pair of signals transmitting asynchronous serial data” in claim 18 is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants respectfully submit that the present application clearly supports this feature. For example, Figure 1 of the present application discloses a plurality of lines 52 that are configured into a “star-shaped” network. Further, Figures 7 and 8, as well as, page 13, lines 11-23 of the present application disclose a driver with paired differential output that is used with the RS422 industrial standard interfacing protocol. The element 50 in Figure 8 consisting of an input line connected to a triangle together with small circles on the triangle at the positive output line and the negative output line represent an RS-422 line driver. Accordingly, Applicants respectfully submit that the 35 U.S.C. § 112, first paragraph, rejection of claim 18 is not proper. If the Examiner persists in maintaining this rejection, Applicants respectfully request a more detailed explanation of why the feature of “wherein the network comprises a plurality of lines, each of the plurality of lines having at least a pair of signals transmitting asynchronous serial data” is considered to be not shown in the specification.

Third, the Office Action alleges that the feature of “wherein the control computer and the chip are separate chips” in claim 23 is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. By way of the foregoing

amendment, Applicants have cancelled claim 23. Accordingly, Applicants respectfully submit that the 35 U.S.C. § 112, first paragraph, rejection of claim 23 is now moot.

Fourth, the Office Action alleges that the feature of “wherein the chip comprises a RAM” in claim 24 is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. By way of the foregoing amendment, Applicants have cancelled claim 24. Accordingly, Applicants respectfully submit that the 35 U.S.C. § 112, first paragraph, rejection of claim 24 is now moot.

Fifth, the Office Action alleges that the feature of “wherein the chip comprises a microprocessor” in claim 25 is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. By way of the foregoing amendment, Applicants have amended claim 25, as suggested by the Examiner, to recite “wherein the chip is a microprocessor. Further, Applicants respectfully submit that the present application clearly supports this feature. For example, Figure 8, as well as, page 10, lines 6-10 of the present application clearly disclose a chip with a microprocessor. Accordingly, Applicants respectfully submit that the 35 U.S.C. § 112, first paragraph, rejection of claim 25 is now moot.

Sixth, the Office Action alleges that the feature of “wherein the microprocessor comprises an address decoder” in claim 26 is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. By way of the foregoing amendment, Applicants have amended claim 26 to recite “wherein the microprocessor is

connected to an address decoder." Support can also be found, for example in Fig. 8, as well as, at page 13, lines 11-23 of the present application. Accordingly, Applicants respectfully submit that the 35 U.S.C. § 112, first paragraph, rejection of claim 26 is now moot.

Seventh, the Office Action alleges that the feature of "wherein a condition of the copier and setup parameters, a copy count and error codes of the copier are displayed on a display screen of the personal computer" in claim 27 is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants respectfully submit that the present application clearly supports this feature. For example, Figure 21 of the present application shows elements on a display screen, such as "ID: 001", "TYPES: X-1025", "LOCATION: LAB", "STATUS: OFFLINE" and "NUMBER TO COPY: 00". Further, Figure 22 of the present application clearly shows a display listing of error codes. Accordingly, Applicants respectfully submit that the 35 U.S.C. § 112, first paragraph, rejection of claim 27 is improper. If the Examiner persists in maintaining this rejection, Applicants respectfully request a more detailed explanation of why the feature of "wherein a condition of the copier and setup parameters, a copy count and error codes of the copier are displayed on a display screen of the personal computer" is considered to be not shown in the specification.

For these reasons, Applicants respectfully submit that all of the 35 U.S.C. § 112, first paragraph, rejections should be withdrawn.



**All Claims Comply With 35 U.S.C. § 112, second paragraph**

Claims 32-35 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as their invention. At page 5 of the Office Action, claim 32 was rejected because the meaning of the phrase "image forming device" is allegedly unclear. Claims 33-35 were rejected for the same reason because of their dependence on claim 32. By way of the foregoing Amendment, Applicants have changed "image forming device" in claim 32 to "copier system". Applicants respectfully submit that the phrase "copier system" is clear since the present application discloses a system for a copier. Accordingly, Applicants respectfully request that the 35 U.S.C. § 112, second paragraph, rejection of claim 32, as well as dependent claims 33-35, be withdrawn.

**All Claims Comply With 35 U.S.C. § 103(a)**

Claims 16 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,077,582 to Kravette et al. in view of U.S. Patent Reissue No. 31,222 to McCracken, U.S. Patent No. 3,975,712 to Hepworth et al. and U.S. Patent No. 4,644,478 to Stephens et al. To the extent that the Examiner may consider this rejection to still apply to independent claim 16, as amended, Applicants traverse this rejection as being based on upon references that neither describe nor suggest the novel combination of features now recited in independent claim 16, as amended. For example, amended independent claim 16 now recites, amongst other features, "a memory device corresponding to the copier, the memory device storing data comprising a special information to identify the copier in the network, the memory

device capable of retaining data if power to the memory device is removed." Support for such a feature is found, for example, at page 10, lines 11-34 of the present application.

In contrast to the presently claimed invention, Kravette et al. discloses at column 11, lines 53-60 that RAM 102 is used to store identification data. Applicants respectfully submit that RAM does not retain information without power. Thus, Kravette et al. fails to disclose "the memory device capable of retaining data if power to the memory device is removed" because the RAM 102 of Kravette et al. would not retain identification data if power to the memory device is removed.

Applicants also respectfully submit that McCracken, Hepworth et al. and Stephens et al. do not cure the deficiencies of Kravette et al. as discussed above with regard to newly-amended independent claim 16. More specifically, Kravette et al., either separately or combined with McCracken, Hepworth et al. and/or Stephens et al., do not describe or suggest "a memory device corresponding to the copier, the memory device storing data comprising a special information to identify the copier in the network, the memory device capable of retaining data if power to the memory device is removed."

For at least the above reasons, Applicants respectfully assert that the 35 U.S.C. § 103(a) rejection of claim 16 is improper because Kravette et al., either alone or in combination with McCracken, Hepworth et al. and/or Stephens et al., do not teach or suggest all of the features recited in independent claim 16, as amended. Moreover, dependent claim 17 is allowable for the same reasons as discussed above with regard to its base claim 16 and for the additional features that claim 17 recites. Accordingly, Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of claims 16 and 17 be withdrawn.

Claims 18-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,077,582 to Kravette et al. in view of U.S. Patent Reissue No. 31,222 to McCracken, U.S. Patent No. 3,975,712 to Hepworth et al. and U.S. Patent No. 4,644,478 to Stephens et al. as applied to claim 16, and further in view of U.S. Patent No. 4,625,077 to Biffle et al. To the extent that the Examiner may consider this rejection to still apply, Applicants respectfully assert that the Biffle et al. reference applied in this 35 U.S.C. § 103(a) rejection does not cure the deficiencies of Kravette et al. as discussed above with regard to independent claim 16. Thus, Applicants respectfully assert that claims 18-31 are allowable at least because of their dependence on independent claim 16, and for the additional features that they recite. Accordingly, Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of claims 18-31 be withdrawn.

**New Claim 36 is Patentable**

Applicants respectfully submit that new claim 36 is at least allowable because none of the prior art of record describes or suggests "a memory corresponding to the copier, the memory storing a special information to identify the copier and enables recognition of the copier by a database manager operating on the personal computer, the memory capable of retaining data if power to the memory is removed." Further, Applicants respectfully submit that the arguments above with regard to independent claim 16 are also applicable to independent claim 36. Dependent claim 37 is allowable at least for the same reasons that independent claim 36 is allowable, and for the additional features that it recites.

**CONCLUSION**

In view of the foregoing, Applicants respectfully request reconsideration and the timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of the response, the Examiner is invited to contact the Applicants' undersigned representative to expedite prosecution.

Respectfully submitted,

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